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EXAMINER

HERRERA, DIEGO D

ART UNIT PAPER NUMBER

2683

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/824,360

Applicant(s)

PARK, HEE-LA

Examiner

Diego Herrera

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04/15/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/15/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Examiners suggestion: "Method for receiving multiple SMS messages combined to make an MMS message in a telecommunication system".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6, 9, 10 and 21-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Na (U.S. Patent Application Publication # 2001/0041578 A1).

1. Regarding Claim 1, Na shows and discloses, a method for receiving a wireless message in a mobile telecommunication system (Title, Abstract) comprising:
 - a. Receiving a first SMS message (Fig. 2 and 5; Paragraphs [0011] & [0012], Na clearly teaches a method of sending of messages to another mobile terminal).
 - b. Performing a flag setting in a mobile station (MS) based on the received first SMS message (Fig. 2 and 5; Paragraphs [0011] & [0012], Na clearly

teaches a method of keeping track and receiving such messages onto the receiving terminal); and

- c. Receiving a second SMS message (Fig. 2 and 5; Paragraphs [0011] & [0012], Na clearly teaches a plurality of messages being sent to the receiving mobile terminal).
2. Consider claim 2, and as applied to claim 1 above, Na discloses and shows performing processing after receiving the second SMS message (Paragraphs [0011] & [0012], Na teaches the constructing of the message after receiving the last marked messages and combining them to one multimedia message).
3. Consider claim 6, and as applied to claim 1 above, Na discloses and shows determining whether the SMS message is a general SMS message or a MMS notification message based on data included in a header of the first SMS message (Fig. 3, Paragraphs [0027]-[0030], [0048]-[0050], & [0055]-[0057], Na teaches the system of determining whether the message is a part of a concatenated sequence of messages to be part of a MMS message from the information contained in the messages).
4. Consider claim 9, and as applied to claim 1 above, Na discloses and shows the performing of a RAU processing (Paragraph [0012], where Na teaches that there is a process where the SMS is checked for Multimedia data and if it is then the message is divided and routed until the last message is received), forming one MMS notification message from the two received SMS messages, and storing the one MMS notification message in the MS (Fig. 2 and 5; Paragraphs [0059]-

[0060], Na teaches the decoding and receiving of multiple messages being converted to make one message in order for the terminal user to view).

5. Regarding claim 10, inherently Na discloses and teaches a method for receiving a wireless message in a mobile station that sequentially receives two SMS messages constituting a MMS notification message from a network through different radio resource connections (Fig. 2 and 5; Paragraphs [0059]-[0060], Na teaches the decoding and receiving of multiple messages being converted to make one message in order for the terminal user to view), Na teaches inherently wherein a routing area update (RAU) is controlled based on the received SMS messages (Paragraph [0012], where Na discusses an SMS is a page, inherently provoking a route update, Na also teaches that there is a process where the SMS is checked for Multimedia data and if it is then the message is divided and routed until the last message is received. Furthermore, the SMS message is a page message, so it inherently causes a location area update).
6. Regarding claim 21, Na discloses and shows a method of communication in a mobile telecommunication system (Abstract, title) comprising:
 - a. Receiving a first SMS message (Fig. 2 and 5; Paragraphs [0011] & [0012], Na clearly teaches a method of sending of messages to another mobile terminal);
 - b. Determining whether the first SMS message comprises part of a MMS notification message (Paragraphs [0011] & [0012] & [0022], Na teaches a

differentiation making emphasis on the distinguishing a Multimedia from a regular message and then acting accordingly); and

- c. Setting a flag based on the determination regarding the first SMS message (Paragraph [0024], Na teaches the use of reference when diving the message in parts for transmission this is understood to be a form of a marker or flag that tell the system that this part is part of a message to be compiled at terminal user's location).

7. Consider claim 22, and as applied to claim 21 above, Na inherently discloses and shows releasing a radio resource connection when the first SMS message is determined to be part of the MMS notification (Paragraphs [0072], [0079]-[0083], & [0087]-[0088], Na teaches the use of a control section that checks for messages received and once received it searches for to see if it is the last if it is not then it proceeds to after an interval to retransmit. Fig. 8a, Paragraph [0011] & [0012], Na explains multiple messages received and then combined to make a multimedia message).
8. Consider claim 23, and as applied to claim 21 above, Na discloses and shows receiving a second SMS message (Fig. 2 and 5; Paragraphs [0011] & [0012], Na clearly teaches a plurality of messages being sent to the receiving mobile terminal).
9. Consider claim 24, and as applied to claim 23 above, Na discloses and shows changing the flag setting after receiving the second SMS message (Paragraphs [0029] & [0030], these paragraphs Na teaches determining means where the

settings are changed so that the system continues after the last part of the message has been determined and system then continues to compile and combine the information into one multimedia message).

10. Consider claim 25, and as applied to claim 24 above, Na inherently discloses performing a routing area update (RAU) processing (Paragraph [0012], where Na teaches that there is a process where the SMS is checked for Multimedia data and if it is then the message is divided and routed until the last message is received. Furthermore, the SMS is a page message, so it inherently causes a location area update).

11. Consider claim 26, and as applied to claim 25 above, Na discloses and shows further comprising:

- a. Decoding the first SMS message and the second SMS message (Abstract, Fig. 8a, 8b, 9a, and 9b, Paragraphs [0081]-[0083]; where both messages are sequentially one after the other and they are decoded for processing to be viewed by the receiving terminal user); and
- b. Forming a single message based on the decoded first SMS message and the second SMS message (Abstract, Fig. 8a, object 829 is where the multiple messages are decoded into one message for terminal user to receive, Paragraph [0059-0060]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2683

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 3, 7, 11-16, & 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Na (U.S. Patent Application Publication # 2001/0041578 A1), in view of Virtanen et al. (U.S. Patent Application Publication # 2002/0006797).

12. Consider claims 3, & 15, and as applied to claims 1 & 10 above, Na discloses and shows wherein the wireless system except comprising one of a GSM based system and a GPRS based system; nevertheless, Virtanen et al. does teach and discloses wireless systems GSM and GPRS (Paragraph [0025] & [0026], Virtanen et al. teaches GSM systems with GPRS services).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon including a wireless system as taught by Na by implementing a GSM and GPRS systems as taught by Virtanen et al. because it would provide a wireless system with the enhanced capability of the subscriber the use of the GSM network comprising GPRS subscriber data

and routing information, including the international mobile subscriber identity (Paragraph [0025]).

13. Consider claim 11, & 12, and as applied to claim 10 above, Na discloses and shows wherein the RAU except that is controlled based on a flag setting of the mobile station; nevertheless, Virtanen et al. teaches the use of flags setting when routing information of SMS (Fig. 2, Paragraphs [0025], and [0031] & [0033], Virtanen et al. teaches and shows the use of flags to direct the routing of the SMS message).

14. Consider claims 7 & 13, and as applied to claim 1 & 11 above, Na does not disclose of shows wherein the flag setting comprises a Boolean function; nevertheless, Virtanen et al. teaches the use of setting of flags by on and off states which can be set (Paragraphs [0076]-[0080], Virtanen et al. teaches the use of flag setting by turning one on and the other off and he specifically teaches the use of one flag to do such feature or different and independent for determining routing events it is understood that this can be done by using Boolean function to get the determining effect and control of the routing as described in reference).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve in the invention of Na upon including a flag setting comprises a Boolean function as taught by Virtanen et al. by implementing the use of flags as a method of controlling routing for the purposes of the advantage of not having unnecessary signaling can be avoided when

mobile is deciding connection type via which the service is to be delivered
(Paragraph [0010]).

15. Consider claim 14, and as applied to claim 11 above, Na discloses and shows receiving the two SMS messages constituting the MMS notification message, however, Na does not teach wherein the flag setting is changed after receiving the two SMS messages making up the MMS notification, nonetheless, Virtanen et al. does teach the use of flags to determine routing of information in wireless system (Paragraph [0025], Fig. 2, Virtanen teaches and shows the routing flags being set on or off).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve in the invention of Na upon including a flag setting system for notifying changes made by the flag according to the number of SMS messages being passed to a final destination as taught by Virtanen et al. for the purpose of having the mobile be aware of the incoming message through the GPRS system (paragraphs [0041]-[0043]).

16. Regarding claim 16, Na discloses and shows a method for receiving a wireless message in a mobile station that receives two SMS messages Constituting a MMS notification message from a wireless system (Fig. 2 and 5; Paragraphs [0059]-[0060], Na teaches the decoding and receiving of multiple messages being converted to make one message in order for the terminal user to view), the method of receiving a second SMS message constituting the MMS notification message (Fig. 8a, Paragraph [0011] & [0012], Na explain multiple messages

received then combined to make a multimedia message), the method comprising: Inherently releasing a radio resource (RR) connection (Paragraphs [0072], [0079]-[0083], & [0087]-[0088], Na teaches the use of a control section that checks for messages received and once received it searches for to see if it is the last if it is not then it proceeds to after an interval to retransmit) when a first SMS message constituting the MMS notification message is received (Fig. 8a, Paragraph [0011] & [0012], Na explain multiple messages received and then combined to make a multimedia message); the RR connection is released; except Performing a flag setting; and Releasing the flag setting, nonetheless, Virtanen et al. teaches flag setting and releasing (Paragraphs [0025], [0031]-[0033], & [0049]-[0050], Virtanen et al. teaches that there are flags used for routing messages through the system, it is inherent that the releasing of the flag happens after one full process is done).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon performing an RR connection release as taught by Na by introducing a flag setting and releasing as taught by Virtanen et al. for the purposes of whether a route is available for delivery (Paragraph [0025]).

17. Consider claim 17, and as applied to claim 16 above, Na discloses and shows re-performing the RR connection after performing the flag setting (Fig. 9A & 9B, Paragraph [0087]-[0089], Na teaches and shows the retransmission, meaning

the reconnection of the radio resource, when concatenated messages are to follow the previous message for combining).

18. Consider claim 18, and as applied to claim 16 above, Na discloses and shows wherein the wireless system except comprising one of a GSM based system and a GPRS based system; nevertheless, Virtanen et al. does teach and discloses wireless systems GSM and GPRS (Paragraph [0025] & [0026], Virtanen et al. teaches GSM systems with GPRS services).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon including a wireless system as taught by Na by implementing a GSM and GPRS systems as taught by Virtanen et al. because it would provide a wireless system with the enhanced capability of the subscriber the use of the GSM network comprising GPRS subscriber data and routing information, including the international mobile subscriber identity (Paragraph [0025]).

19. Consider claim 19, and as applied to claim 16 above, Na does not disclose of shows wherein the flag setting comprises a Boolean function; nevertheless, Virtanen et al. teaches the use of setting of flags by on and off states which can be set (Paragraphs [0076]-[0080], Virtanen et al. teaches the use of flag setting by turning one on and the other off and he specifically teaches the use of one flag to do such feature or different and independent for determining routing events it is understood that this can be done by using Boolean function to get the determining effect and control of the routing as described in reference).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve in the invention of Na upon including a flag setting comprises a Boolean function as taught by Virtanen et al. by implementing the use of flags as a method of controlling routing for the purposes of the advantage of not having unnecessary signaling can be avoided when mobile is deciding connection type via which the service is to be delivered (Paragraph [0010]).

20. Consider claim 20, and as applied to claim 16 above, Na discloses and shows performing RAU (Fig. 2 and 5; Paragraphs [0011] & [0012], Na clearly teaches a plurality of messages being sent to the receiving mobile terminal) and decoding the two received SMS messages after releasing the flag setting (Fig. 2 and 5; Paragraphs [0059]-[0060], Na teaches the decoding and receiving of multiple messages being converted to make one message in order for the terminal user to view).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Na (U.S. Patent Application Publication # 2001/0041578 A1), and in view of Bodic et al. (U.S. Patent Application Publication # 2003/0040300 A1).

21. Consider claim 4, and as applied to claim 1 above, Na discloses and shows wherein the multimedia short message comprises a multimedia short message of a MMS notification message; except, SMS message of a MMS notification message, nevertheless, Bodic et al. shows and discloses a system where the SMS message comprises a SMS message of a MMS notification message (Fig.

7, 8a, 9, and 10; paragraph [0027], [0030], & [0031], where Bodic et al. teaches the series of SMS messages are converted into MMS message).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve the invention of Na upon including a system where the SMS message comprises a SMS message of a MMS notification message as taught by Bodic et al. for the purpose of regulating roaming cost for the customer when traveling abroad (Paragraph [0057]).

Claims 5 & 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Na (U.S. Patent Application Publication # 2001/0041578 A1), and further in view of Schmidt et al. (U.S. Patent Application Publication # 2004/0097248 A1).

22. Consider claims 5 & 8, and as applied to claim 1 above, Na discloses and shows storing the Short Multimedia message in the MS (Fig. 8a-9b; Paragraphs [0026]-[0030], Na teaches the embodiment of receiving the message and constructing the message also sending a signal alarm that an Multimedia message is waiting for use to open); except informing a user of a message reception when the SMS message is not a SMS message of a MMS message; nevertheless, Schmidt et al. teaches receiving SMS and MMS messages and notifying the user of the type of messages received for viewing (Abstract; Paragraphs [0006] & [0009]; Schmidt et al teaches that the user is notified by an identification signal which contains information about the data received the user then uses this information to make a decision whether a certain type of messages, i.e. SM, MM).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon storing short multimedia messages on a MS as taught by Na by informing a user of a message reception when the SMS message is not a SMS message of a MMS message by implementing a notification system displaying the type of messages received by the user as taught by Schmidt et al. for the purpose of decisively improves checking and transparency (Paragraphs [0010]).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following is a list considered pertinent prior art:

- Rukman (U.S. Patent Application Publication # 2004/0185883 A1),
"System and method for threading short message service (SMS) messages with multimedia messaging service (MMS) messages".
- Shinohara (U.S. Patent Application Publication # 2002/0132608 A1),
"Transmission-origin mobile telephone capable of detecting the media a types and formats of a multimedia message that are receivable by destination mobile telephones in a multimedia communication system".
- Detweiler et al. (U.S. Patent # 6,892,066 B2), "Method, apparatus, and computer program product for an assistance transponder".
- Paakkonen (U.S. Patent Application Publication # 2004/0121818 A1),
"System and method for providing multimedia messaging service (MMS) ringing images on mobile calls".

- McCann et al. (U.S. Patent # 6,885,872 B2), "Method and systems for providing short message gateway functionality in a telecommunications network".
- Soh et al. (U.S. Patent # 6,895,251 B2), "Method for generating multimedia events using short message service".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diego Herrera whose telephone number is (571) 272-0907. The examiner can normally be reached on Monday-Friday, 7AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William G. Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D.H.



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